

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of November 18, 2004.

Reconsideration of the Application is requested.

The Office Action

Claims 1 – 27 remain in this application.

Claims 1 – 10 and 13 – 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hansen (U.S. Patent No. 6,509,974) in view of Freedman (U.S. Patent No. 4,839,829).

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hansen in view of Freedman in further view of admitted prior art.

Comments and Arguments

Regarding the rejection of independent claims 1, 14 and 18, the Office Action asserts that the combination of Hansen and Freedman teaches the claims. Amended independent claim 1 recites a method of automatically extracting print job requirements from a printshop job description language (PSDL) file and automatically creating a proposed workflow using the extracted print job requirements and printshop resource knowledge. A PSDL parser automatically extracts the print job requirements from the PSDL file, without the need for human interaction, and then automatically creates a workflow. The workflow is created taking into account all the print job requirements, such as, the processes that are required to complete the print job, the materials required for the print job and the labor required for the print job. A workflow schedule module then compares the print job requirements against the resource knowledge of the printshop. This resource knowledge includes available resources, such as, machines, materials and operators, work-in-progress, inter-process buffer levels and inter-process connectivity. The workflow schedule module maps the sequence of processes required to complete the print job to the available resources using a resources availability module.

The Applicants respectfully submit that either alone or in combination, Hansen and Freedman fail to teach or fairly suggest independent claim 1.

Hansen discloses a system and method for providing production printing instructions for a printed end document using a job preparation station. Hansen teaches architecture in which an operator can interact with a computer and enter production printing instructions in order to create a print ready file and a job ticket. Neither of these are the proposed workflow of the present claims. Converting a print job into a print ready format does not take into consideration all the information and requirements which the workflow of the present claims does. For example, it does not take into consideration the material and labor costs, the work-in-progress and current schedule of the print shop or the inter-process buffer levels.

The job ticket of Hansen does not anticipate the workflow of the present claims either. The job ticket is just a list of instructions needed to be performed in order to complete the print job and does not include all the information of the workflow of the present claims. For example, the job ticket will only let the operators know that a job requires 1000 black & white copies to be processed whereas the workflow will look at all the print job requirements and available resource information and assign a specific copier and operator to the print job in a specific order automatically, such that the print job is processed efficiently and cost effectively.

The Applicants respectfully submit that Freedman also fails to teach or fairly suggest the claims of the present application. Freedman discloses a system which is interacted with by the user to collect and store information or parameters regarding the user's needs. The system compares this information from the user with the stored information relating to printed work design and capabilities of various printing facilities. The system then chooses which printing facility is most compatible with the user's specific printing needs. The Applicants respectfully submit that Freedman fails to disclose the content of the present claims.

Furthermore, the combination of Hansen and Freedman also fails to teach or fairly suggest the present claims. Specifically, the combination fails to teach a PSDL parser automatically extracting print job requirements from a PSDL file and automatically creating a workflow for the print shop considering the two inputs, print job requirements and available printshop resource knowledge. Rather, the

combination of Hansen and Freedman discloses a typical workflow which orchestrates or manages the print job between the various steps of the overall production, for example a workflow will be created for the pre-press step of the production process and when the pre-press step is completed a workflow will be generated for the printing step. Whereas the workflow of the present claims is created, submitted to the job submitter and approved before any processing of the print job is started, such that the generated workflow encompasses the entire print job from start to completion, as is disclosed in dependent claims 7 and 24. For at least these reasons, the Applicants respectfully submit that independent claim 1 and claims 2 – 13 which depend therefrom distinguish over the cited art and are in condition for allowance.

Regarding the rejection of independent claims 14 and 18, the claims have been amended to further show the distinctions of the claims from the cited art. Specifically, the claims have been amended to more clearly teach the comparison of the print job requirements against the resource knowledge of the present claims. For the reasons stated above, the Applicants respectfully submit that neither Hanson nor Freedman alone or in combination teach or fairly suggest the claimed subject matter of claims 14 and 18. The cited art fails to disclose automatically extracting print job requirements from a PSDL file, comparing the print job requirements against the available resources, status of the work-in-progress and the current schedule of the printshop. Therefore, the Applicants respectfully submit that independent claims 14 and 18 distinguish over the cited references and are in condition for allowance. Furthermore, claims 15 – 17 and 19 – 25 which depend respectively therefrom also distinguish over the references and are in condition for allowance.

Independent claims 26 and 27 have also been amended and for the same reasons as stated above distinguish over the cited art and are in condition for allowance.


CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application (Claims 1 – 27) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark S. Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

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Date

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